Name _____ Date _____ Period __

2.3 Grams, Moles, & Molecules Notes (E)

Building a bow (bow & arrow) and I have 1 _____ and 1 _____.

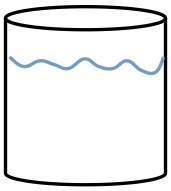
Building a bow (bow & arrow) and I have 1.0 kg of _____ and 1.0 kg of _____.

Which of these 2 ways of counting works better? Why?

Building a water molecule and I have 2 grams of Hydrogen and 1 gram of Oxygen.
Building a water molecule and I have 2 Hydrogen atoms and 1 Oxygen atom.

Idea #1: It is easier to _____.

How many molecules are in a cup of water?



Mass of water molecule: 2.992×10^{-23} grams.
A cup of water's mass: 236.6 grams

Number of water molecules in a cup = _____

Idea #2: It is easier to _____.

(We do this with doughnuts! I'd like _____ doughnuts.)

The Mole

A mole is _____ particles.

This is _____'s number.

What's a "particle"?

Look on page _____ to find a comparison of moles. Why are they different sizes?

Why do we need a "mole"?

Name _____ Date _____ Period __

Practice Converting
More practice can be found on pages _____.

Grams & Moles

Moles & Molecules

Grams & Molecules

Remember, on a quiz you'll have to figure out which is which!